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PTO/SB/01 (08-03)
Approved for use through 07/31/2006. OMB 0651-0032
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DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION (37 CFR 1.63) <input type="checkbox"/> Declaration Submitted With Initial Filing OR <input checked="" type="checkbox"/> Declaration Submitted after Initial Filing (surcharge (37 CFR 1.16 (e)) required)	Attorney Docket Number	17495US01
	First Named Inventor	Philip G. Hill
	COMPLETE IF KNOWN	
	Application Number	10/573,393
	Filing Date	March 23, 2006
	Art Unit	
	Examiner Name	

I hereby declare that:

Each inventor's residence, mailing address, and citizenship are as stated below next to their name.

I believe the inventor(s) named below to be the original and first inventor(s) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

METHOD FOR CONTROLLING COMBUSTION IN AN INTERNAL COMBUSTION ENGINE AND PREDICTING PERFORMANCE AND EMISSIONS

the specification of which (Title of the Invention)

☐ is attached hereto

OR

☒ was filed on (MM/DD/YYYY) 03/23/2006 as United States Application Number or PCT International

Application Number 11/ and was amended on (MM/DD/YYYY) (if applicable).

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended specifically referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT International filing date of the continuation-in-part application.

I hereby claim foreign priority benefits under 35 U.S.C. 119(a)-(d) or (f), or 365(b) of any foreign application(s) for patent, inventor's or plant breeder's rights certificate(s), or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below, by checking the box, any foreign application for patent, inventor's or plant breeder's rights certificate(s), or any PCT international application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application Number(s)	Country	Foreign Filing Date (MM/DD/YYYY)	Priority Not Claimed	Certified Copy Attached?	
				YES	NO
PCT/CA2004/001735	PCT	09/23/2004	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2,441,686	Canada	09/23/2003	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

☐ Additional foreign application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto:

[Page 1 of 2]

This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 21 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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DECLARATION — Utility or Design Patent Application

Direct all correspondence to: <input checked="" type="checkbox"/> Customer Number 23446 OR <input type="checkbox"/> Correspondence address below			
Name			
Address			
City	State	ZIP	
Country	Telephone	Fax	
I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.			
NAME OF SOLE OR FIRST INVENTOR:		<input type="checkbox"/> A petition has been filed for this unsigned inventor	
Given Name Philip G. (first and middle [if any])		Family Name Hill or Surname	
Inventor's Signature <i>Philip G Hill</i>		Date <i>July 13 2006</i>	
Residence: City Vancouver	State BC	Country Canada	Citizenship Canada
Mailing Address 2037 Allison Road			
City Vancouver	State BC	Zip V6T 1T2	Country Canada
NAME OF SECOND INVENTOR:		<input type="checkbox"/> A petition has been filed for this unsigned inventor	
Given Name Mark E. (first and middle [if any])		Family Name Dunn or Surname	
Inventor's Signature <i>Mark E Dunn</i>		Date <i>6th July 2006</i>	
Residence: City Vancouver	State BC	Country Canada	Citizenship United Kingdom
Mailing Address 3820 West 20th Avenue			
City Vancouver	State BC	Zip V6S 1G2	Country Canada
<input checked="" type="checkbox"/> Additional inventors or a legal representative are being named on the <u>1</u> supplemental sheet(s) PTO/SB/02A or 02LR attached hereto.			

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PTO/SB/02A (09-04)

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DECLARATION	ADDITIONAL INVENTOR(S) Supplemental Sheet
Page <u>1</u> of <u>1</u>	

Name of Additional Inventor, if any				<input type="checkbox"/> A petition has been filed for this unsigned inventor	
Given Name (first and middle (if any))			Family Name or Surname		
Guowei			Li		
Inventor's Signature 				Date <u>June 28, 2006</u>	
Residence: City	Vancouver	State	BC	Country	Canada
Citizenship Canada					
Mailing Address #1-1198 West 70th Ave					
Mailing Address					
City	Vancouver	State	BC	ZIP	V6P 2Y3
				Country	Canada
Name of Additional Inventor, if any				<input type="checkbox"/> A petition has been filed for this unsigned inventor	
Given Name (first and middle (if any))			Family Name or Surname		
Dehong			Zhang		
Inventor's Signature 				Date <u>July 11, 2006</u>	
Residence: City	Vancouver	State	BC	Country	Canada
Citizenship Canada					
Mailing Address #102 - 997 W. 22nd Avenue					
Mailing Address					
City	Vancouver	State	BC	Zip	V5Z 2A2
				Country	Canada
Name of Additional Inventor, if any				<input type="checkbox"/> A petition has been filed for this unsigned inventor	
Given Name (first and middle (if any))			Family Name or Surname		
Inventor's Signature				Date	
Residence: City		State		Country	
Citizenship					
Mailing Address					
Mailing Address					
City		State		Zip	
Country					

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POWER OF ATTORNEY and CORRESPONDENCE ADDRESS INDICATION FORM	Application Number	10/573,393
	Filing Date	March 23, 2006
	First Named Inventor	Phillip G. Hill
	Title	METHOD FOR CONTROLLING COMBUSTION IN AN INTERNAL COMBUSTION ENGINE AND PREDICTING PERFORMANCE AND EMISSIONS
	Art Unit	
	Examiner Name	
	Attorney Docket Number	17495US01

I hereby appoint:

☒ Practitioners associated with the Customer
Number: 23446

OR

☐ Practitioner(s) named below:

Name	Registration Number

as my/our attorney(s) or agent(s) to prosecute the application identified above, and to transact all business in the United States Patent and Trademark Office connected therewith.

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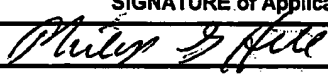
I am the:

☒ Applicant/Inventor.

☐ Assignee of record of the entire interest. See 37 CFR 3.71.

Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)

SIGNATURE of Applicant or Assignee of Record

Signature		Date	July 13 2006
Name	Philip G. Hill	Telephone	604-718-2077
Title and Company	Consultant, Westport Research Inc.		

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.

☒ *Total of 5 forms are submitted.

This collection of information is required by 37 CFR 1.31 and 1.33. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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<input type="checkbox"/> Firm or Individual Name			
Address			
Address			
City	State	ZIP	
Country			
Telephone	Fax		

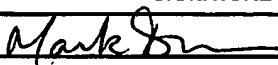
I am the:

☒ Applicant/Inventor.

☐ Assignee of record of the entire interest. See 37 CFR 3.71.

Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)

SIGNATURE of Applicant or Assignee of Record

Signature		Date	6 th July 2006
Name	Mark E. Dunn	Telephone	604-718-8319
Title and Company	Director, Engine Technology Division, Westport Research Inc.		

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.

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Address

Address

City

State

ZIP

Country

Telephone

Fax

I am the:

☒ Applicant/Inventor.

☐ Assignee of record of the entire interest. See 37 CFR 3.71.

Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)

SIGNATURE of Applicant or Assignee of Record

Signature Guowei Li Date June 28, 2006

Name Guowei Li Telephone 604-718-1920

Title and Company Research Scientist, Westport Research Inc.

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.

☒ *Total of 5 forms are submitted.

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	Attorney Docket Number	17495US01

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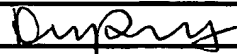
<input type="checkbox"/> Firm or Individual Name			
Address			
Address			
City	State	ZIP	
Country			
Telephone	Fax		

I am the:

☒ Applicant/Inventor.

☐ Assignee of record of the entire interest. See 37 CFR 3.71.

Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)

SIGNATURE of Applicant or Assignee of Record			
Signature		Date	July 11, 2006
Name	Dehong Zhang	Telephone	604-718-6474
Title and Company	Research Scientist, Westport Research Inc.		

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.

☒ *Total of 5 forms are submitted.

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	First Named Inventor	Philip G. Hill
	Title	METHOD FOR CONTROLLING COMBUSTION IN AN INTERNAL COMBUSTION ENGINE AND PREDICTING PERFORMANCE AND EMISSIONS
	Art Unit	
	Examiner Name	
	Attorney Docket Number	17495US01

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☒ Practitioners associated with the Customer
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OR

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Name	Registration Number

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☐ The address associated with Customer Number:

OR

<input type="checkbox"/> Firm or Individual Name				
Address				
Address				
City		State		ZIP
Country				
Telephone		Fax		


I am the:

☐ Applicant/Inventor.

☒ Assignee of record of the entire interest. See 37 CFR 3.71.

Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)

SIGNATURE of Applicant or Assignee of Record

Signature			Date	19 MAY 2006
Name	D. Andrew Lew	Telephone	604-718-2020	
Title and Company	Director, Intellectual Property & Counsel, Westport Research Inc.			

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.

☒ *Total of 5 forms are submitted.

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STATEMENT UNDER 37 CFR 3.73(b)

Applicant/Patent Owner: Westport Research Inc.

Application No./Patent No.: 10/573,393 Filed/Issue Date: March 23, 2006

Entitled: METHOD FOR CONTROLLING COMBUSTION IN AN INTERNAL COMBUSTION ENGINE AND PREDICTING PERFORMANCE AND EMISSIONS

Westport Research Inc. a corporation of the Province of British Columbia

(Name of Assignee)

(Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is:

1. ☒ the assignee of the entire right, title, and interest; or
2. ☐ an assignee of less than the entire right, title, and interest

The extent (by percentage) of its ownership interest is _____ %

in the patent application/patent identified above by virtue of either:

- A. ☐ An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached.

OR

- B. ☐ A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as shown below:

1. From: _____ To: _____
The document was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached.

2. From: _____ To: _____
The document was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached.

3. From: _____ To: _____
The document was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached.

☐ Additional documents in the chain of title are listed on a supplemental sheet.

- ☒ Copies of assignments or other documents in the chain of title are attached.

[NOTE: A separate copy (i.e., a true copy of the original document(s)) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

[Signature]
Signature

D. Andrew Lew

Director, Intellectual Property & Counsel

19 MAY 2006
Date

604-718-2020

Telephone Number

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ASSIGNMENT

Filing Date: 23 September 2003

Application Serial No: 2441686

WHEREAS WE, **Philip G. Hill** of 2037 Allison Road, Vancouver, British Columbia, Canada V6T 1T2, **Dehong Zhang** of 703-2121 West 44th Ave., Vancouver, British Columbia, Canada V6M2G5, **Guowei Li** of 206-1251 West 71st Ave. Vancouver, British Columbia, Canada V6P3A9 and **Mark E. Dunn** of 2263 Redbud Lane, Vancouver British Columbia, Canada V6K 4V7 (hereinafter collectively called the "Assignors"), have invented certain new and useful improvements described and claimed in an application for Canadian Letters Patent, filed in the Canadian Intellectual Property Office on the above-identified date with the Canadian Commissioner of Patents. Said Canadian Patent Application entitled:

Method For Controlling Combustion In An Internal Combustion Engine And Predicting Performance And Emissions

AND WHEREAS, **Westport Research Inc.**, (hereinafter called the "Assignee") whose full post office address is 1700 West 75th Avenue, Vancouver, British Columbia, Canada V6P 6G2, is desirous of acquiring the entire right, title and interest in and to the said application, and in, to and under any and all Letters Patent which may be granted on or as a result thereof in any and all countries;

NOW THEREFORE, in consideration of the sum of ONE (\$1.00) DOLLAR and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, WE, the Assignors, do hereby, both jointly and severally, sell, assign, transfer and set over to the Assignee the entire right, title and interest in and to the said inventions or improvements and said application, and any and all continuations, divisions, renewals of or substitutes for said application, and in, to and under any and all Letters Patent which may be granted on or as a result thereof, and any reissue or reissues of said Letters Patent; and WE assign to and authorize the Assignee to file in our names applications for Letters Patent for said inventions or improvements in all countries, the same to be held and enjoyed by the Assignee, its successors, assigns, nominees or legal representatives, to the full end of the term or terms for which said Letters Patent respectively may be granted, re-issued or extended, as fully and entirely as the same would have been held and enjoyed by us, had this assignment, sale and transfer not been made;

AND, WE hereby covenant that WE have the full right to convey the entire interest herein assigned, and that WE have not executed and will not execute any agreement in conflict herewith, and WE further covenant and agree that WE will, each time request is made and without undue delay, execute and deliver all such papers as may be necessary or desirable to perfect the title to said inventions or improvements, said application and said Letters Patent, in the Assignee, its successors, assigns, nominees or legal representatives, and WE agree to communicate to the Assignee, or its nominees, all known facts respecting said inventions or improvements, said application and said Letters Patent, to testify in any legal proceedings, to sign

BEST AVAILABLE COPY

all lawful papers, to execute all disclaimers and divisional, continuing, re-issue and foreign applications, to make all rightful oaths, and generally to do everything possible to aid the Assignee, its successors, assigns, nominees and legal representatives to obtain and enforce for its or their own benefit, proper patent protection for said inventions or improvements in any and all countries, all at the expense, however, of the Assignee or its successors, assigns, nominees or legal representatives;

AND WE hereby authorize and request the agents of record in said application to insert in this assignment the filing date and serial number of said application when officially known.

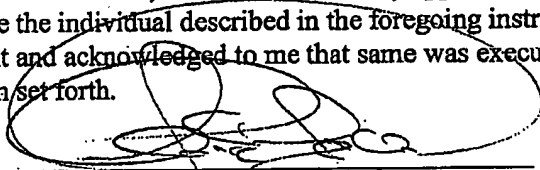
AND WE hereby authorize and request the Canadian Commissioner of Patents and any official of any country or countries foreign to Canada whose duty it is to issue patents on applications as aforesaid, to issue to the Assignee, as assignee of the entire right, title and interest, any and all Letters Patent for said inventions or improvements, which may be issued and granted on or as a result of the application aforesaid, in accordance with the terms of this Assignment.

SIGNED at Vancouver, Province of British Columbia, Canada this 27th day of Oct 31st, 2003.

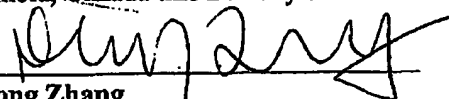

Philip G. Hill

I hereby certify that on the day and year aforesaid, before me personally appeared Philip G. Hill to me known and known to me to be the individual described in the foregoing instrument, and in my presence executed this instrument and acknowledged to me that same was executed of his own free will and for the purpose therein set forth.

SEAL:


Notary Public

SIGNED at Vancouver, Province of British Columbia, Canada this 24th day of October 2003.


Dehong Zhang

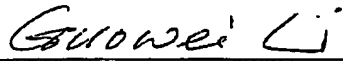
I hereby certify that on the day and year aforesaid, before me personally appeared Dehong Zhang to me known and known to me to be the individual described in the foregoing instrument, and in my presence executed this instrument and acknowledged to me that same was executed of his own free will and for the purpose therein set forth.

SEAL:

BEST AVAILABLE COPY

Notary Public

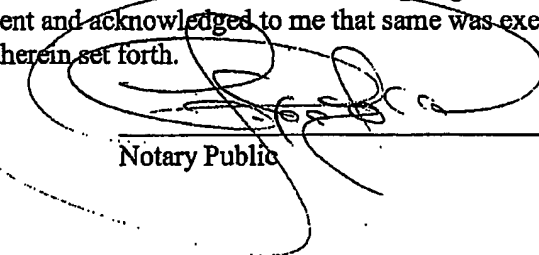
SIGNED at Vancouver, Province of British Columbia, Canada this 24th day of October 2003.



Guowei Li

I hereby certify that on the day and year aforesaid, before me personally appeared **Guowei Li** to me known and known to me to be the individual described in the foregoing instrument, and in my presence executed this instrument and acknowledged to me that same was executed of his own free will and for the purpose therein set forth.

SEAL:



Notary Public

SIGNED at Vancouver, Province of British Columbia, Canada this 24th day of October 2003.



Mark E. Dunn

I hereby certify that on the day and year aforesaid, before me personally appeared **Mark E. Dunn** to me known and known to me to be the individual described in the foregoing instrument, and in my presence executed this instrument and acknowledged to me that same was executed of his own free will and for the purpose therein set forth.

SEAL:



Notary Public